

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Attorney Docket No. **020431.0662**

In re Application of: §  
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**BRIAN M. KENNEDY** § Examiner:  
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Serial No. **09/510,607** § **VIVEK D. KOPPIKAR**  
§  
§  
Filed: **22 FEBRUARY 2000** § Art Unit: **3626**  
§  
For: **MANAGING DATA ASSOCIATED** § Confirmation No.: **2320**  
**WITH AVAILABLE-TO-PROMISE**  
**(ATP) PRODUCTS** §  
§

**AMENDMENT**

**MAIL STOP: RCE**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir/Madam:

A Final Office Action in the subject Application was mailed to the undersigned on 16 November 2010, which provides for a shortened statutory response period ending 16 February 2011. A Request for Continued Examination (RCE) is submitted electronically herewith. Please enter the following amendments and consider the following remarks.

**IN THE CLAIMS:**

A complete listing of the claims is set forth below. Please amend the claims as follows:

**1-42. (Canceled)**

**43. (Currently Amended)** A computer-implemented system for managing data associated with available-to-promise (ATP) products, comprising:

a memory storing a hierarchy of seller models, each seller model representing a seller of one or more products within a hierarchy of sellers and within a seller organization, each product having a product forecast model representing:

forecasted sales of the product through each seller;

planned supply of the product;

customer orders for the product through each seller; and

pre-allocated supply of the product to each seller, the pre-allocated supply is a supply of the product pre-allocated to each seller to promise to subsequent customer orders for the product through each seller; and

a processor coupled with the memory, the processor computes the amount of the product that is ATP at a seller according to at least the planned supply of the product, the customer orders for the product through each seller, the pre-allocated supply of the product to each seller, and the amount of the product that is ATP at one or more other sellers in the hierarchy\_of sellers within the seller organization,

wherein the processor further adjusts the pre-allocated supply of the product to each seller according to customer orders across a time horizon and recomputes the amount of the product that is ATP at each seller according to the adjusted pre-allocated supply.

44.     **(Previously Presented)** The system of Claim 43, wherein the processor further adjusts the pre-allocated supply of the product to each seller according to one or more business criteria selected from the group consisting of seller criteria, product criteria, forecast criteria, supply criteria, customer order criteria, and policy criteria

45.     **(Previously Presented)** The system of Claim 43, wherein the processor further:  
communicates product forecast models to a remote system;  
receives from the remote system a promise computed at the remote system for a customer order requesting a quantity of a product through each seller, the promise computed according to the pre-allocated supply of the product to each seller;  
receives from the remote system adjusted product forecast models reflecting the promise;  
and  
recomputes the amount of the product that is ATP at each seller.

46.     **(Previously Presented)** The system of Claim 45, wherein:  
all product forecast models for one or more sellers are communicated to the remote system; and  
wherein the processor further:  
receives from the remote system the promise also computed according to the amount of the product that is ATP at the one or more other sellers in the hierarchy; and  
adjusts the amount of the product that is ATP at the one or more other sellers in the hierarchy when the promise exceeds the pre-allocated supply of the product to each seller.

47.     **(Previously Presented)** The system of Claim 43, wherein the product forecast model further represents a quantity of the product each seller has committed to selling and the processor adjusts the pre-allocated supply of the product to each seller according to the committed quantity.

48.     **(Previously Presented)** The system of Claim 43, wherein the processor further:  
accepts a customer order requesting a quantity of a product through each seller, and  
computes a promise for the customer order according to the planned supply and one or more  
existing customer orders, the promise restricted according to the pre-allocated supply of the  
product to each seller.

49.     **(Previously Presented)** The system of Claim 43, wherein:  
each product forecast model is extensible such that one or more policy rules is associated  
with the corresponding product;  
each policy rule comprises a restriction on either the forecasted sales or the pre-allocated  
supply of the product to each seller; and  
either the forecasted sales or the pre-allocated supply of the product to each seller is  
computed according to the policy rules.

50.     **(Previously Presented)** The system of Claim 43, wherein the processor further  
adjusts either the forecasted sales or the pre-allocated supply of the product to each seller  
according to an arrival rate of customer orders for the product through each seller.

51. **(Currently Amended)** A computer-implemented system for managing data associated with available-to-promise (ATP) products, comprising:

a memory storing a hierarchy of seller models representing a seller of products within a hierarchy of sellers and within a seller organization that each correspond to an item having one or more restrictions on its sale, at least two products corresponding to the same item but with at least one different restriction, each product having a product forecast model representing:

forecasted sales of the product through each seller;

planned supply of the product;

customer orders for the product through each seller; and

pre-allocated supply of the product to each seller, the pre-allocated supply is a supply of the product pre-allocated to each seller to promise to subsequent customer orders for the product through each seller; and

a processor coupled with the memory, the processor computes the amount of the product that is ATP at a seller according to at least the planned supply of the product, the customer orders for the product through each seller, the pre-allocated supply of the product to each seller, and the amount of the product that is ATP at one or more other sellers in the hierarchy of sellers within the seller organization,

wherein the processor further adjusts the pre-allocated supply of the product to each seller according to customer orders across a time horizon and recomputes the amount of the product that is ATP at each seller according to the adjusted pre-allocated supply.

52. **(Previously Presented)** The system of Claim 51, wherein the restrictions are selected from the group consisting of price restrictions, quantity restrictions, and lead time restrictions.

53. **(Previously Presented)** The system of Claim 51, wherein the processor further adjusts the pre-allocated supply of the product to each seller according to one or more business criteria selected from the group consisting of seller criteria, product criteria, forecast criteria, supply criteria, customer order criteria, and policy criteria.

54. **(Previously Presented)** The system of Claim 51, wherein the processor further:  
communicates product forecast models to a remote system;  
receives from the remote system a promise computed at the remote system for a customer order requesting a quantity of one or more items through each seller, the promise computed according to at least the pre-allocated supply for corresponding products;  
receives from the remote system adjusted product forecast models reflecting the promise;  
and  
recomputes the amounts of the corresponding products that are ATP at each seller.

55. **(Previously Presented)** The system of Claim 51, wherein the product forecast model further represents a quantity of corresponding products each seller has committed to selling and the processor adjusts the pre-allocated supply of the product to each seller according to the committed quantity.

56. **(Previously Presented)** The system of Claim 51, wherein the processor further:  
accepts a customer order requesting quantities of one or more items through each seller;  
and  
computes a promise for the customer order according to the pre-allocated supply for corresponding products, wherein the promise comprises a plurality of options each with one or more of the restrictions specified for these products.

57. **(Previously Presented)** The system of Claim 51, wherein:
- each product forecast model is extensible such that one or more policy rules is associated with the corresponding product;
  - each policy rule comprises a restriction on either the forecasted sales or the pre-allocated supply of the product to each seller; and
  - either the forecasted sales or the pre-allocated supply of the product to each seller are computed according to the policy rules.

58. **(Previously Presented)** The system of Claim 51, wherein the processor further adjusts either the forecasted sales or the pre-allocated supply for one or more products for each seller according to an arrival rate of customer orders for those products through each seller.

59. **(Currently Amended)** A method for managing data associated with available-to-promise (ATP) products, comprising:

accessing by a computer comprising a memory and a processor, a hierarchy of seller models stored in the memory, each seller model representing a seller of one or more products within a hierarchy of sellers and within a seller organization, each product having a product forecast model representing:

forecasted sales of the product through each seller;

planned supply of the product;

customer orders for the product through each seller; and

pre-allocated supply of the product to each seller, the pre-allocated supply is a supply of the product pre-allocated to each seller to promise to subsequent customer orders for the product through each seller; and

computing by the processor, the amount of the product that is ATP at a seller according to at least the planned supply of the product, the customer orders for the product through each seller, the pre-allocated supply of the product to each seller, and the amount of the product that is ATP at one or more other sellers in the hierarchy of sellers within the seller organization,

wherein the processor further adjusts the pre-allocated supply of the product to each seller according to customer orders across a time horizon and recomputes the amount of the product that is ATP at each seller according to the adjusted pre-allocated supply.

60. **(Previously Presented)** The method of Claim 59, further comprising adjusting the pre-allocated supply of the product to each seller according to one or more business criteria selected from the group consisting of seller criteria, product criteria, forecast criteria, supply criteria, customer order criteria, and policy criteria.

61.     **(Previously Presented)** The method of Claim 59, further comprising:

communicating product forecast models to a remote system;

receiving a promise computed at the remote system for a customer order requesting a quantity of a product through each seller, the promise having been computed according to the pre-allocated supply of the product to each seller;

receiving from the remote system adjusted product forecast models reflecting the promise; and

recomputing the amount of the product that is ATP at each seller.

62.     **(Previously Presented)** The method of Claim 61:

wherein all product forecast models for one or more sellers are communicated to the remote system;

wherein the promise is computed according to the amount of the product that is ATP at the one or more other sellers in the hierarchy; and

further comprising adjusting the amount of the product that is ATP at the one or more other sellers in the hierarchy when the promise exceeds the pre-allocated supply of the product to each seller.

63.     **(Previously Presented)** The method of Claim 59:

wherein the product forecast model further represents a quantity of the product each seller has committed to selling; and

further comprising adjusting the pre-allocated supply of the product to each seller according to the committed quantity.

64. **(Previously Presented)** The method of Claim 59, further comprising:

accepting a customer order requesting a quantity of a product through each seller, and computing a promise for the customer order according to the planned supply and one or more existing customer orders, the promise restricted according to the pre-allocated supply of the product to each seller.

65. **(Previously Presented)** The method of Claim 59, wherein:

each product forecast model is extensible such that one or more policy rules is associated with the corresponding product;

each policy rule comprises a restriction on either the forecasted sales or the pre-allocated supply of the product to each seller; and

either the forecasted sales or the pre-allocated supply of the product to each seller is computed according to the policy rules.

66. **(Previously Presented)** The method of Claim 59, further comprising adjusting either the forecast values or the pre-allocated supply of the product to each seller according to an arrival rate of customer orders for the product through each seller.

67. **(Currently Amended)** A method for managing data associated with available-to-promise (ATP) products, comprising:

accessing by a computer comprising a memory and a processor, a hierarchy of seller models stored in the memory, each seller model representing a seller of products within a hierarchy of sellers and within a seller organization that each correspond to an item having one or more restrictions on its sale, at least two products corresponding to the same item but with at least one different restriction, each product having a product forecast model representing:

forecasted sales of the product through each seller;

planned supply of the product;

customer orders for the product through each seller; and

pre-allocated supply of the product to each seller, the pre-allocated supply is a supply of the product pre-allocated to each seller to promise to subsequent customer orders for the product through each seller; and

computing by the processor, the amount of the product that is ATP at a seller according to at least the planned supply of the product, the customer orders for the product through each seller, the pre-allocated supply of the product to each seller, and the amount of the product that is ATP at one or more other sellers in the hierarchy of sellers within the seller organization,

wherein the processor further adjusts the pre-allocated supply of the product to each seller according to customer orders across a time horizon and recomputes the amount of the product that is ATP at each seller according to the adjusted pre-allocated supply.

68. **(Previously Presented)** The method of Claim 67, wherein the restrictions are selected from the group consisting of price restrictions, quantity restrictions, and lead time restrictions.

69.     **(Previously Presented)** The method of Claim 67, further comprising adjusting the pre-allocated supply of the product to each seller according to one or more business criteria selected from the group consisting of seller criteria, product criteria, forecast criteria, supply criteria, customer order criteria, and policy criteria.

70.     **(Previously Presented)** The method of Claim 67, further comprising:

communicating product forecast models to a remote system;

receiving a promise computed at the remote system for a customer order requesting a quantity of one or more items through each seller, the promise having been computed according to at least the pre-allocated supply for corresponding products;

receiving from the remote system adjusted product forecast models reflecting the promise; and

recomputing the amounts of the corresponding products that are ATP at each seller.

71.     **(Previously Presented)** The method of Claim 67, wherein:

the product forecast model further represents a quantity of corresponding products each seller has committed to selling; and

further comprising adjusting the pre-allocated supply of the product to each seller according to the committed quantity.

72.     **(Previously Presented)** The method of Claim 67, further comprising:

accepting a customer order requesting quantities of one or more items through each seller, and computing a promise for the customer order according to the pre-allocated supply for corresponding products, wherein the promise comprises a plurality of options each with one or more of the restrictions specified for these products.

73. **(Previously Presented)** The method of Claim 67, wherein:

each product forecast model is extensible such that one or more policy rules is associated with the corresponding product;

each policy rule comprises a restriction on either the forecasted sales or the pre-allocated supply of the product to each seller; and

either the forecasted sales or the pre-allocated supply of the product to each seller is computed according to the policy rules.

74. **(Previously Presented)** The method of Claim 67, further comprising adjusting either the forecasted sales or the pre-allocated supply for one or more products for each seller according to an arrival rate of customer orders for those products through each seller.

## **REMARKS**

Claims 43-74 are pending in the present application.

Claims 1-42 have been previously canceled without *prejudice*.

Claims 43-48, 50, 59-64, and 66 stand rejected under 35 U.S.C. § 103(a) over EP 425,405 A2 to James et al. (“James”) in view of U.S. Patent No. 5,459,656 to Fields et al. (“Fields”) and in further view of “The keys to the enterprise: integrated applications drive information systems to new horizons – enterprise wide integration” to Dusty Rhodes (“Rhodes”).

Claims 49, 51-58, 65, 67-69, and 71-74 stands rejected under 35 U.S.C. § 103(a) over *James* in view of *Fields* and *Rhodes* and in further view of “Dun & Bradstreet Software Delivers Sales and Promotion System to Manufacturers” to Frank O. Smith (“Smith”).

Applicant respectfully submits that all of Applicant’s arguments and amendments are without prejudice or disclaimer. In addition, Applicant has merely discussed example distinctions from the cited prior art. Other distinctions may exist, and as such, Applicant reserves the right to discuss these additional distinctions in a future Response or on Appeal, if appropriate. Applicant further respectfully submits that by not responding to additional statements made by the Examiner, Applicant does not acquiesce to the Examiner’s additional statements. The example distinctions discussed by Applicant are considered sufficient to overcome the Examiner’s rejections. In addition, Applicant reserves the right to pursue broader claims in this Application or through a continuation patent application. No new matter has been added.

### **I. Office Action Contains Inconsistencies with Applicant’s Claim Limitations:**

Applicant notes with thanks the Examiner’s response of 16 November 2010. However, Applicant notes that the Examiner’s Office Action of 2 July 2010 is mostly identical with the Examiner’s previous Final Office Actions of 2 July 2010, 18 February 2010 and 17 August 2009

and **contains inconsistencies with Applicant's current claim limitations**. Applicant noted the same inconsistencies in the previous response. Specifically, Applicant stated:

Applicant notes with thanks the Examiner's response of 18 February 2010. However, Applicant notes that the Examiner's Final Office Action of 18 February 2010 is identical with the Examiner's previous Final Office Action of 17 August 2009 and contains inconsistencies with Applicant's current claim limitations. As one example, numerous times in the Examiner's response of 18 February 2010, the Examiner refers to Claim 11 however; Applicant canceled Claim 11 without *prejudice on 5 August 2009*.

Applicant is unclear as to whether Applicant's response to the Final Office Action of 17 August 2009 was fully considered, let alone even considered prior to mailing out the present Final Office Action. Applicant respectfully requests the Examiner to fully consider Applicant's claim amendments and arguments in this response as well as Applicant's previous response.

(18 June 2010 Response to office action, page 14). For example, Applicant again points out that there are numerous times in the recent Office Actions that the Examiner refers to Claim 11 and the Examiner's argument as applied to claim 11; however **Applicant again notes that Applicant canceled Claim 11 without prejudice on 5 August 2009**, appropriate correction is requested. As another example, in the Response to Arguments portion of the present Office Action, the Examiner states:

Applicant's arguments filed on **May 6, 2008** have been fully considered but they are not persuasive.

(16 November 2010 Final Office Action, page 20). (Emphasis added). **Applicant is unclear as to whether the Examiner has considered any of Applicant's responses or arguments after May 6, 2008 and respectfully requests the Examiner to address this issue, appropriate correction is requested**. Furthermore, in the Response to Arguments portion of the present Office Action, the Examiner states "applicants argue that Fields does not teach 'at least two seller models that each represent a seller for one or more products' wherein each product is associated with a 'product forecast model'." Applicant respectfully submits that in the previous response, Applicant argued the current claim amendments and specifically stated "*Fields fails to disclose at least the limitation of Claim 43 of a 'hierarchy of seller models, each seller model representing a seller of one or more products, each product having a product forecast model.'*" The Examiner is silent and fails to address Applicant's current claim amendments, but instead

only addresses or considers Applicant's arguments filed on May 6, 2008. **Applicant respectfully requests the Examiner to fully consider Applicant's claim amendments and arguments in this response as well as Applicant's previous responses.**

**II. Rejections under 35 U.S.C. § 103(a):**

Claims 43-48, 50, 59-64, and 66 stand rejected under 35 U.S.C. § 103(a) over *James* in view of *Fields* and in further view of *Rhodes*. Claims 49, 51-58, 65, 67-69, and 71-74 stand rejected under 35 U.S.C. § 103(a) over *James* in view of *Fields* and *Rhodes* and in further view of *Smith*.

While Applicant respectfully submits that Applicant's claims in their prior, unamended form are not rendered obvious by the proposed combination of *James*, *Fields*, *Rhodes*, or *Smith*, in an effort to further prosecution and issuance of the subject Application, Applicant currently submits amendments to the claims. Applicant further respectfully submits that Claims 43-74 in their current amended form contain unique and novel limitations that are not taught, suggested, or even hinted at in *James*, *Fields*, *Rhodes*, or *Smith*, either individually or in combination. Thus, Applicant respectfully traverses the Examiners obvious rejection of Claims 43-74 under 35 U.S.C. § 103(a) over the proposed combination of *James*, *Fields*, *Rhodes*, or *Smith*, either individually or in combination.

**a. The proposed *James-Fields-Rhodes-Smith* Combination Fails to Disclose Various Limitations Recited in Applicant's Claims**

In rejecting Claim 43, the Examiner states the following:

*James* does not explicitly disclose *two seller models that each represent a seller for one or more products each product being associated with a product forecast model; and forecasted sales of the product through the seller.*

(November 16, 2010 Final Office Action, page 3). (Emphasis Added). Applicant thanks the Examiner for noting the shortcomings in *James* and respectfully points out that Applicant's Claim 43 recites, among other things "a memory storing *a hierarchy of seller models, each seller model representing a seller of one or more products within a hierarchy of sellers and*

*within a seller organization, each product having a product forecast model* representing [...] *forecasted sales of the product through each seller,*" which as acknowledged by the Examiner by silence, James also fails to disclose.

Nonetheless, Applicant respectfully disagrees with the Examiner's assertion that *Fields* provides these missing elements and in fact, respectfully submits that *Fields* fails to disclose at least the limitation of Claim 43 of "a memory storing *a hierarchy of seller models, each seller model representing a seller of one or more products within a hierarchy of sellers and within a seller organization*, each product *having a product forecast model* representing [...] *forecasted sales of the product through each seller.*"

In particular, the Examiner states:

***Fields clearly discloses two seller models*** (*Fields*: Col. 2, Ln. 1-9). *Fields* clearly teaches that a model can cover a plurality of business items and the Office, therefore, takes the position that this means that the model disclosed in *Fields* can be applied to many different business items wherein each item is covered by a model as is suggested by the Summary section in *Fields*. Therefore, since *Fields* disclose a plurality of items that can be covered by its model ***it inherently discloses*** a plurality (including two) seller models. In one embodiment of *Fields*, ***the two products Fields mentions in the above cited passages come from two different sellers.*** In the cited portion of *Fields*, there is a disclosure stating that the [past business] demand for a plurality (more than one) of products is tracked in the invention of *Fields*. Based on this disclosure, the Office interprets this as meaning that there are at least two seller models that are disclosed because since the step of "tracking" in *Fields* involves more than one product it is inherent that the multiple products can be ordered by more than one seller.

(November 16, 2010 Final Office Action, page 20). (Emphasis added). Applicant thanks the Examiner for noting that *Fields* does not expressly disclose Applicant's claim limitations. However, Applicant respectfully disagrees with the Examiner's assertions that Applicant's claim limitations are suggested in the summary section of *Fields*. In support of Applicant's position, Applicant respectfully directs the Examiner's attention to the cited portion of the "SUMMARY OF THE INVENTION" section of *Fields*, provided below, on which the Examiner relies:

## SUMMARY OF THE INVENTION

The present invention provides a system and method for analyzing business demand which incorporates tracking of past business demand for a *plurality of products or tasks*, time intervals during the day, and other factors, storing...

(Column 2, Lines 5-9). (Emphasis added). Applicant respectfully submits that the portion of *Fields*, on which the Examiner relies fails to disclose at least a “*hierarchy of seller models, each seller model representing a seller of one or more products within a hierarchy of sellers and within a seller organization*, each product *having a product forecast model* representing [...] *forecasted sales of the product through each seller*,” as required by Claim 43.

Furthermore, Applicant finds no such teachings anywhere in *Fields* and certainly not in the cited columns and lines of *Fields*, relied on by the Examiner, that “*the two products Fields mentions in the above cited passages come from two different sellers*,” as asserted by the Examiner. By contrast, as shown above, *Fields* merely discloses that *Fields* “incorporates tracking of past business demand for a *plurality of products or tasks*.” *Fields* is silent and therefore, fails to disclose a “*hierarchy of seller models, each seller model representing a seller of one or more products within a hierarchy of sellers and within a seller organization*, each product *having a product forecast model* representing [...] *forecasted sales of the product through each seller*”. Applicant respectfully submits that merely stating that “*the two products Fields mentions in the above cited passages come from two different sellers*” is not analogous to actually disclosing it. That is, simply stating that “*the two products Fields mentions in the above cited passages come from two different sellers*” does not mean that *Fields* actually discloses that two alleged products in *Fields* actually come from two different sellers. The cited portions of *Fields* does not teach, suggest, or even hint that *Fields* discloses “*two products* [...] *come from two different sellers*,” as asserted by the Examiner.

In addition, Applicant respectfully submits that the Examiner is silent as to Applicant's limitation of a “*hierarchy of seller models, each seller model representing a seller of one or more products within a hierarchy of sellers and within a seller organization*, each product *having a product forecast model*.” That is, merely tracking of *past* business demand for a product is not analogous to “forecasted sales of the product through each seller,” as required by Claim 43.

Therefore, introducing *Fields* into the proposed combination fails to render obvious the affirmatively claimed action of a “*hierarchy of seller models, each seller model representing a seller of one or more products within a hierarchy of sellers and within a seller organization*, each product *having a product forecast model* representing [...] *forecasted sales of the product through each seller*” because, among other things the disclosure of *Fields* fails to yield any result (i.e., merely tracking of past business demand for a *plurality of products or tasks*) let alone a predictable result for the above-referenced elements of Claim 43.

Accordingly, Applicant respectfully requests that the rejection of Applicant’s claims as obvious over the proposed combination of *James*, *Fields*, *Rhodes*, and *Smith* be withdrawn.

**b. The Office Action Also Acknowledges that *James* and *Fields* Fail to Disclose Other Limitations Recited in Applicant’s Claims**

In rejecting Claim 43, the Examiner further states the following:

*James* does not explicitly disclose *pre-allocated supply of the product to each seller and the system operable to compute the amount of the product that is ATP at each seller according to the planned supply, the customer orders, the pre-allocated supply, a hierarchy of seller models, and the amount of the product that is ATP at one or more other sellers at a higher level in a seller hierarchy.*

However, Rhodes discloses pre-allocated supply of the product to each seller (i.e. plan sales expectations)(pages 4 and 5 of the NPL document Rhodes) and the system operable to compute the amount of the product that is ATP at each seller according to the planned supply, the customer orders, the pre-allocated supply and the amount of the product that is ATP at one or more other sellers (i.e. linking sales and marketing strategies to material and resource scheduling ...)(page 3-Image version of document).

(November 16, 2010 Final Office Action, pages 3-4). (Emphasis added). Applicant again notes that the Examiner relies on pages 4 and 5 of the NPL document of Rhodes, however, the NPL document of Rhodes only contains 4 pages, for the purpose of this response, Applicant assumes the Examiner means pages 3 and 4 of Rhodes, appropriate correction is requested.

Applicant thanks the Examiner for noting that *James* (and by silence *Fields* – although, Applicant notes that the Examiner states that *Fields* fails to disclose this limitations at page 14 of

the present Office Action) fail to disclose “pre-allocated supply of the product to each seller, the pre-allocated supply is *a supply of the product pre-allocated to each seller to promise to subsequent customer orders for the product through each seller.*”

However, Applicant respectfully disagrees with the Examiner’s assertion that *Rhodes* provides these missing elements and in fact, respectfully submits that *Rhodes* fails to disclose at least Claim 43 limitations of a “*product forecast model*” representing “*pre-allocated supply of the product to each seller*, the pre-allocated supply is *a supply of the product pre-allocated to each seller to promise to subsequent customer orders for the product through each seller,*” “*computing the amount of the product that is ATP at a seller according to at least the planned supply of the product*, the customer orders for the product through each seller, the pre-allocated supply of the product to each seller, and the amount of the product that is ATP at one or more other sellers in the *hierarchy of sellers within the seller organization*,” and “*adjusting the pre-allocated supply of the product to each seller according to customer orders across a time horizon and recomputing] the amount of the product that is ATP at each seller according to the adjusted pre-allocated supply.*”

The Examiner further states the following:

As per the recitation of “the pre-allocation of the supply of the product to the seller occurring prior to distribution of the pre-allocated supply of the product to the seller,” the Examiner respectfully submits that *Rhodes* discloses an order department being able to “look” into the manufacturing system to determine what is currently in production to give a viable ATP date (page 2). It is noted that a product must be allocated to a seller before it is distributed to the seller. For example, a customer placing an order for a product and being told when it will be delivered has “allocated” the product for himself (See also Applicant’s Background of the Invention, page 2, lines 15-26). The product is then delivered to the customer (“distributed”) after an order has been placed (See also Applicant’s Background of the Invention, page 2, lines 15-26).

(November 16, 2010 Final Office Action, page 4). (Emphasis added). Applicant respectfully disagrees with the Examiner’s assertions and respectfully directs the Examiner’s attention to page 2 of *Rhodes*, provided below, on which the Examiner relies:

In an integrated SOP environment, both forecasting and DRP are used to drive purchasing and the master production schedule (MPS) in manufacturing. MPS linked with order management closes the information loop such *that when a*

*customer calls to place an order, the order department can “look” into the manufacturing system to determine what’s currently in production* to give viable available-to-promise dates. Accurate historical data on customer orders in order management also gets fed back into the forecasting system, where the process starts all over again.

(Emphasis added). By contrast, as shown above, *Rhodes* merely discloses, among other things, that “*when a customer calls to place an order, the order department can ‘look’ into the manufacturing system to determine what’s currently in production*.” *Rhodes* is silent and therefore fails to disclose a “*product forecast model*” representing “*pre-allocated supply of the product to each seller*,” the pre-allocated supply is a supply of the product pre-allocated to each seller to promise to subsequent customer orders for the product through each seller,” as required by Claim 43. In fact, as shown above, the disclosure of the portions of *Rhodes* relied upon by the Examiner is directed toward determining “*what’s currently in production*” “*when a customer calls to place an order*.” That is, *determining what’s currently in production* in response to *a customer calling] to place an order* as disclosed in *Rhodes* does not equate to a supply of the product pre-allocated to each seller of the hierarchy of sellers *prior to receiving customer orders*, as required by Claim 43.

In fact, *Rhodes* does not even disclose that it looks into the manufacturing system, but instead merely states that it can look into the manufacturing system to determine what’s currently in production. What *Rhodes* calls looking into the manufacturing system is simply an abstraction that describes an indefinite function of a possible action, which “can” be performed by some undefined component “order department” of the *Rhodes* system. The “order department” is essentially a black box that “can” perform a possible action. But whether it does or how it does so is left undisclosed.

The Examiner further states the following:

As per the recitation of “a hierarchy of seller models” [...] *Rhodes* discloses allowing business information systems to communicate with different trading partnerships, where the system encompass the flow of physical goods (and information) form the supplying organizations into the businesses and subsequently to its customers (Note: Page 6, Paragraph 5 of the (non-patent literature) (NPL) reference of *Rhodes teaches transferring goods from supplying organizations to businesses and then to customers which is a form of hierarchy*.

(November 16, 2010 Final Office Action, page 4). (Emphasis added). Applicant respectfully disagrees with the Examiner's assertions and respectfully submits that *Rhodes* does not disclose, among other things a "*hierarchy of seller models, each seller model representing a seller of one or more products within a hierarchy of sellers and within a seller organization,*" as required by Claim 43, as amended. By contrast and as acknowledged by the Examiner "*Rhodes teaches transferring goods from supplying organizations to businesses and then to customers.*" *Rhodes* is silent and therefore fails to disclose "*each seller model representing a seller of one or more products within a hierarchy of sellers and within a seller organization,*" as required by Claim 43 as amended.

Accordingly, Applicant respectfully requests that the rejection of Applicant's claims as obvious over the proposed combination of *James*, *Fields*, *Rhodes*, and *Smith* be withdrawn.

**III. The Office Action Fails to Properly Establish a *Prima Facie* case of Obvious over the Proposed *James-Fields-Rhodes-Smith* Combination According to the UPSTO Examination Guidelines**

Applicant respectfully submits that the Office Action fails to properly establish a *prima facie* case of obviousness based on the proposed combination of *James*, *Fields*, *Rhodes*, or *Smith*, either individually or in combination, and in particular, the Office Action fails to establish a *prima facie* case of obviousness based on the "Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in View of the Supreme Court Decision in *KSR International Co. v. Teleflex Inc.*" (the "Guidelines").

As reiterated by the Supreme Court in *KSR International Co. v. Teleflex Inc. (KSR)*, the framework for the objective analysis for determining obviousness under 35 U.S.C. 103 is stated in *Graham v. John Deere Co.* (383 U.S. 1, 148 USPQ 459 (1966)). Obviousness is a question of law based on underlying factual inquiries. These factual inquiries enunciated by the Court are as follows:

- (1) Determining the scope and content of the prior art;
- (2) Ascertaining the differences between the claimed invention and the prior art; and
- (3) Resolving the level of ordinary skill in the pertinent art.

(Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). Objective evidence relevant to the issue of obviousness must be evaluated by Office personnel. (383 U.S. 17–18, 148 USPQ 467 (1966)). As stated by the Supreme Court in *KSR*, “While the sequence of these questions might be reordered in any particular case, the [Graham] factors continue to define the inquiry that controls.” (*KSR*, 550 U.S. at \_\_, 82 USPQ2d at 1391).

However, it is important to note that the Guidelines require that Office personnel “*ensure that the written record includes findings of fact* concerning the state of the art and the teachings of the references applied. (Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). In addition, the Guidelines remind Office personnel that the “*factual findings made by Office personnel are the necessary underpinnings to establish obviousness.*” (*id.*). Further, “*Office personnel must provide an explanation to support an obviousness rejection* under 35 U.S.C. 103. (*id.*). In fact, “35 U.S.C. 132 requires that the applicant be notified of the reasons for the rejection of the claim so that he or she can decide how best to proceed” and “clearly setting forth findings of fact and the rationale(s) to support a rejection in an Office action leads to the prompt resolution of issues pertinent to patentability.” (*id.*).

With respect to the subject application, the Office Action has not shown the *factual findings necessary to establish obviousness* or even *an explanation to support the obviousness rejection* based on the proposed combination of *James, Fields, Rhodes, and Smith*. The Office Action merely states that “it would have been obvious to one of ordinary skill in the art at the time of Applicant’s invention to include the teachings of Fields within the James system [and] to include the features as disclosed by Rhodes within the James and Fields combination”. (November 16, 2010 Final Office Action, pages 3-5). Applicant respectfully disagrees and respectfully submits that the Examiner’s conclusory statement is not sufficient to establish the *factual findings necessary to establish obviousness* and is not a sufficient *explanation to support the obviousness rejection* based on the proposed combination of *James, Fields, Rhodes, and Smith*. *Applicant respectfully requests that the Examiner provide proper support for the obviousness rejection under 35 U.S.C. 103 as necessitated by the Guidelines, including the factual findings necessary to establish obviousness to “ensure that the written record includes findings of fact concerning the state of the art and the teachings of the references applied.* (Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)).

The Guidelines further provide guidance to Office personnel in “determining the scope and content of the prior art” such as, for example, “Office personnel must first obtain a thorough understanding of the invention disclosed and claimed in the application.” (Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). The scope of the claimed invention must be clearly determined by giving the claims the “broadest reasonable interpretation consistent with the specification.” (See Phillips v. AWH Corp., 415 F.3d 1303, 1316, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005) and MPEP § 2111.). In addition, the Guidelines state that any *“obviousness rejection should include*, either explicitly or implicitly in view of the prior art applied, *an indication of the level of ordinary skill.”* (Notice, 72 Fed. Reg. 57528 (Oct. 10, 2007)). With respect to the subject Application, the Office Action has not provided *an indication of the level of ordinary skill. Applicant respectfully requests that the Examiner provide proper support for the obviousness rejection under 35 U.S.C. 103 as necessitated by the Guidelines, including an indication of the level of ordinary skill, relied upon by the Examiner.* (Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)).

The Guidelines still further provide that once the *Graham* factual inquiries are resolved, Office personnel must determine whether the claimed invention would have been obvious to one of ordinary skill in the art. (*Id.*). For example, the Guidelines state that *Office personnel must explain why the difference(s) between the prior art and the claimed invention would have been obvious to one of ordinary skill in the art.* (*Id.*). In addition, the Guidelines state that the proper analysis is *whether the claimed invention would have been obvious to one of ordinary skill in the art after consideration of all the facts.* (*Id.* and See 35 U.S.C. 103(a)).

With respect to the subject Application, the Office Action has not expressly resolved any of the *Graham* factual inquiries to determine whether Applicant’s invention would have been obvious to one of ordinary skill in the art. In addition, the Office Action fails to *explain why the difference(s) between the proposed combination of James, Fields, Rhodes, Smith and Applicant’s claimed invention would have been obvious to one of ordinary skill in the art.* The Office Action merely states that “in order to provide products in timely response to customer demands” and for “allowing access to relevant data, facilitating fast decision making and providing material and resource management information to sales and marketing teams.” (November 16, 2010 Final Office Action, pages 3-5). Applicant respectfully disagrees and further respectfully requests clarification as to how this statement *explains why the difference(s) between the proposed combination of*

*James, Fields, Rhodes, Smith and Applicant's claimed invention would have been obvious to one of ordinary skill in the art.* Applicant further respectfully submits that the Examiner is using the subject Application as a template to formulate reconstructive hindsight, which constitutes impermissible use of hindsight under 35 U.S.C. § 103(a).

The Guidelines yet further state that the “key to supporting any rejection under 35 U.S.C. 103 is the *clear articulation of the reason(s) why the claimed invention would have been obvious.*” (Notice, 72 Fed. Reg. 57528 (Oct. 10, 2007)). In fact, the Supreme Court in *KSR* noted that “*the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit.*” (*id.*). The Court quoting *In re Kahn* (441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)), stated that “[R]ejections on *obviousness cannot be sustained by mere conclusory statements;* instead, there *must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.*” (*KSR*, 550 U.S. at \_\_, 82 USPQ2d at 1396). The Guidelines provide the following seven rationales:

- (A) Combining prior art elements according to known methods to yield predictable results;
- (B) Simple substitution of one known element for another to obtain predictable results;
- (C) Use of known technique to improve similar devices (methods, or products) in the same way;
- (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;
- (E) “Obvious to try”—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;
- (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art;
- (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

Applicant respectfully submits that the *Office Action fails to provide any articulation, let alone, clear articulation of the reasons why Applicant's claimed invention would have been obvious.* For example, the *Examiner has not adequately supported the selection and combination of James, Fields, Rhodes, and Smith to render obvious Applicant's claimed invention.* The

Examiner's unsupported conclusory statements that "it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include the teachings of Fields within the James system [and] to include the features as disclosed by Rhodes within the James and Fields combination" and "in order to provide products in timely response to customer demands" and for "allowing access to relevant data, facilitating fast decision making and providing material and resource management information to sales and marketing teams", *does not adequately provide clear articulation of the reasons why Applicant's claimed invention would have been obvious*. (November 16, 2010 Final Office Action, pages 3-5). In addition, the Examiner's unsupported conclusory statement fails to meet any of the Guidelines rationales to render obvious Applicant claimed invention.

Thus, if the Examiner continues to maintain the obvious rejection based on the proposed combination of *James, Fields, Rhodes, and Smith*, *Applicant respectfully requests that the Examiner provide proper support for the obviousness rejection under 35 U.S.C. 103 as necessitated by the Guidelines, including a statement by the Examiner identifying which one of the seven rationales the Examiner is relying on and the proper analysis of that particular rationale, as required by the Guidelines*.

#### **IV. Applicant's Claims are Patentable over the Proposed James-Fields-Rhodes-Smith Combination**

Applicant respectfully submits that Claim 43 is considered patentably distinguishable over the proposed combination of *James, Fields, Rhodes, or Smith*. This being the case, Claims 51, 59, and 67 are also considered patentably distinguishable over the proposed combination of *James, Fields, Rhodes, or Smith*, for at least the reasons discussed above in connection with Claim 43.

Furthermore, with respect to dependent Claims 44-50, 52-58, 60-66, and 68-74; Claims 44-50 depend from Claim 43; Claims 52-58 depend from Claim 51; Claims 60-66 depend from Claim 59; and Claims 68-74 depend from Claim 67. As mentioned above, each of Claims 43, 51, 59, and 67 are considered patentably distinguishable over *James, Fields, Rhodes, or Smith*. Thus, dependent Claims 44-50, 52-58, 60-66, and 68-74 are considered to be in condition for allowance for at least the reason of depending from an allowable claim.

For at least the reasons set forth herein, Applicant respectfully submits that Claims 43-74 are not rendered obvious by the proposed combination of *James*, *Fields*, *Rhodes*, or *Smith*. Applicant further respectfully submits that Claims 43-74 are in condition for allowance. Thus, Applicant respectfully requests that the rejection of Applicant's claims under 35 U.S.C. § 103(a) be reconsidered and that Claims 43-74 be allowed.

**CONCLUSION:**

In view of the foregoing remarks, this application is considered to be in condition for allowance, and early reconsideration and a Notice of Allowance are earnestly solicited.

A Request for Continued Examination (RCE) is being filed electronically herewith to facilitate the processing of this deposit account authorization. **The Director is hereby authorized to charge the \$810.00 RCE fee, to Deposit Account No. 500777.** Although Applicant believes no additional fees are deemed to be necessary; the undersigned hereby authorizes the Director to charge any additional fees which may be required, or credit any overpayments, to **Deposit Account No. 500777**. If an extension of time is necessary for allowing this Response to be timely filed, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) to the extent necessary. Any fee required for such Petition for Extension of Time should be charged to **Deposit Account No. 500777**.

**Please link this application to Customer No. 53184 so that its status may be checked via the PAIR System.**

Respectfully submitted,

February 16, 2010  
Date

/Steven J. Laureanti/signed  
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**CUSTOMER NO. 53184**